

## CLAIMS

### What is claimed is:

1. A planar E-inverted antenna, comprising:  
  
a signal line, connecting to a signal source for feeding a voltage signal;  
  
5 first and second short-circuit ends, respectively connecting to a grounding area for outputting the voltage signal to the grounding area; and  
  
a radio-frequency area, being supported over the grounding area by means of the first and second short-circuit ends, wherein the radio-frequency area and the grounding area have approximately a same length so that a signal is corresponded in radio-frequency to the length  
10 of the radio-frequency area and an electromagnetic wave of the corresponding frequency is received from the outside, the corresponded signal traveling to the grounding area via the short-circuit ends.
2. The antenna structure of claim 1, wherein the radio frequency of the radio-frequency area is  $\lambda/2$ .
- 15 3. A planar E-inverted antenna, comprising:  
  
a feeding portion, connecting to a signal source for feeding a voltage signal;  
  
first and second short-circuit ends, respectively connecting to a grounding area for outputting the voltage signal to the grounding area; and  
  
a radio-frequency area, being supported over the grounding area by means of the first  
20 and second short-circuit ends, wherein the open-circuit area and the grounding area have approximately a same length so that a voltage signal is corresponded in radio frequency to the length of the open-circuit area and an electromagnetic wave of the corresponding frequency is received from the outside, the voltage signal traveling to the grounding area via the

short-circuit ends.

4. The antenna structure of claim 3, wherein the radio frequency of the radio-frequency area is  $\lambda/2$ .